REMARKS

The present response accompanies a Request for Continued Examination (RCE). Claims 1-21 and 23-28 are pending in the present application. Claims 1-5, 7, 8, 11-15, 17, 18, 21 and 23-28 have been amended. No claims have been added or canceled as part of the foregoing amendments. Claim 22 was previously canceled. Therefore, claims 1-21 and 23-28 remain pending in the application.

Claims 1-4, 7, 11-14, 17, 21, 23, 24 and 27 stand rejected under 35 U.S.C. § 112, ¶ 2, as being indefinite "because each of the claims contain the term 'durable indicator,' which the examiner cannot find support for in the Applicant's specification" (Office Action dated February 13, 2007 ("Office Action") at § 5, p. 3). Applicants have deleted the term "durable indicator" from the claims, thereby obviating the rejection with respect to these claims.

Claims 1, 11 and 21 further stand rejected under 35 U.S.C. § 112, ¶ 2, as being incomplete "for omitting essential steps, such omission amounting to a gap between the steps" (Office Action at § 6, p. 3). Although Applicants respectfully disagree that any "essential" steps have been omitted, Applicants have amended claims 1, 11 and 21 to further clarify the claimed invention. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 112, ¶ 2, be withdrawn.

Claims 1-21 and 23-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,933,838 ("Lomet") in view of U.S. Patent Application Publication No. 2004/0024795 ("Hind"). Without conceding the merits of the rejection, independent claims 1, 11 and 21 have been amended in an effort to facilitate prosecution.

As amended, the claims recite, in part, a changed data page that is generated in response to a change made to a data page. Data associated with the change is stored in a transaction log buffer. The changed data page is marked to indicate that the ***transaction log buffer*** has yet to be flushed to a persistent data store. Neither of the cited references teach or suggest marking a changed data page to indicate that a transaction log buffer has yet to be flushed.

More specifically, Lomet teaches a database recovery technique that uses a "state ID" for determining whether ***a changed data page*** has been flushed to a stable database (Lomet at col. 3; ll. 47-60). Lomet discloses a volatile cache 36 for temporarily storing data pages, and

a volatile log 40 for temporarily storing computer operations that reflect changes to the data pages (*id.* at col. 1, ll. 63-65; col. 2, ll. 9-32). To facilitate a database recovery in case of a system crash, Lomet's state ID is assigned to a page each time the page is updated (*id.* at col. 3, ll. 47-48). The page is flushed to a stable databases 28 after several updates (*id.* at col. 3, ll. 40-46). In addition, computer operations corresponding to each update are posted to a stable log 30 and assigned a state ID (*id.* at col. 3, ll. 50-51).

After a system crash, a redo test compares the state ID of the stable log 30 with the state ID of the stable database 28 (*id.* at col. 3, ll. 51-53). If the state ID of the stable log 30 is greater than the state ID of the stable database 28, the system performs a redo operation (*id.* at col. 3, ll. 49-51). The redo operation uses the operations posted to the stable log 30 that have state IDs higher than the state ID of the stable database 28 (*id.* at col. 3, ll. 53-60). In other words, Lomet's state ID indicates that the changed data page has not yet been flushed to the stable database 28 (*id.* at col. 3, ll. 53-57). As such, Lomet's state ID does not indicate whether the volatile log 40 has been flushed to the stable log 30.

Applicants' also respectfully submit that Hind does not supply the missing teachings of Lomet. Rather, the portion of Hind cited in the Office Action discloses a data record synchronization system that utilizes a "change number" (Hind at ¶ [0004]). Hind's change number has nothing to do with whether a transaction log buffer has yet to be flushed to a persistent data store.

Hind's change number is used to maintain synchronicity between data records stored in multiple persistent databases (*id.*). If a data record is changed in one of the databases, the changed number at that database is incremented (*id.*). A message is then sent to the other databases indicating that a change has occurred (*id.*). Upon receiving the message, the change numbers in the other databases are also incremented if each of the databases accept the change (*id.* at ¶ [0005]). That is, Hind's change number indicates whether two or more persistent data bases are synchronized, and is not associated in any way with whether a transaction log buffer has yet to be flushed.

Accordingly, neither Lomet nor Hind teach or suggest marking a changed data page to indicate that a ***transaction log buffer*** has yet to be flushed to a persistent data store.

For at least the foregoing reasons, Applicants respectfully submit that independent claims 1, 11 and 21 patentably define over the cited references and are, therefore, allowable.

As claims 2-10 depend from claim 1, claims 12-20 depend from claim 11, and claims 23-28 depend from clam 21, Applicants further submit that the dependent claims are likewise allowable.

Applicants respectfully request, therefore, that the rejection of claims 1-21 and 23-28 under 35 U.S.C. § 103(a) be withdrawn.

In view of the foregoing, Applicants respectfully submit that the claims are allowable and that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Bryan T. Giles at (215) 564-8954, to discuss the resolution of any remaining issues.

Respectfully submitted,

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